

lished in Washington, D. C., in 1915² no instance of its parasitization has been detected until this year in spite of the fact that thousands of specimens have been sent to the Federal Bureau of Entomology and Plant Quarantine for identification from all parts of Washington and vicinity, and cultures of *vorax* have been maintained continuously in storage rooms at the Department of Agriculture for over 15 years. In some instances cultures of *Anthrenus vorax* in brushes, which had been active for two and three years, were completely destroyed by *Laelius voracis* during the summer of 1939. In one instance every bristle hole in a brush contained cocoons of the parasite. It is always interesting to record the first appearance of a parasite attacking a pest of prime importance, and in this instance it is especially so because for nearly 25 years the furniture carpet beetle has been spreading actively, apparently without being checked by any parasite.

HERIADINE BEES FROM THE BELGIAN CONGO.

By T. D. A. COCKERELL.

Heriades pachyacanthus, sp. n.

Male.—Length about 7.5 mm., anterior wing 5; black, including mandibles and tegulae, the long antennae (reaching scutellum) obscurely brownish beneath; pubescence white, long and abundant on front (where directed upward), sides of face, and lower half of clypeus except in middle; head broad, but facial quadrangle much longer than broad; mandibles robust, tridentate, the cutting edge very oblique; labial palpi stout; clypeal margin denticulate; upper margin and broad middle of clypeus shining, the shining area shaped rather like the skull of a long-horned ox; vertex with dense large punctures; tegulae minutely punctured; mesothorax with large dense punctures, the intervals shining; scutellum prominent, conspicuously shining but well punctured; axillae stout, spined, but the spines thick and not long; postscutellum entirely dull, but base of metathorax with a broad shining band; wings greyish, not brown, in some lights appearing somewhat milky; stigma dusky red, not very dark, not very robust; nervures brown; basal nervure little arched, falling considerably short of nervulus; second cubital cell rather short, receiving first recurrent nervure some distance from base, and second near end; hair on inner side of hind tarsi fulvous; abdomen closely punctured, third tergite conspicuously shining, fourth dull; tergites 2 to 4 with narrow marginal hair-bands, and white hair at apical sides of first; basal area of first sharply defined; apical margin strongly concave; genitalia pale reddish; second ventral segment elevated, with a very long dense fringe of white hair.

² Back, E. A., and Cotton, R. T. The furniture carpet beetle (*Anthrenus vorax* Waterhouse), a pest of increasing importance in the United States. Ent. Soc. Wash. Proc., vol. 38, no. 9, pp. 189–198, illus., Dec. 1936.

Belgian Congo (Katanga); Elisabethville, Sept. 11-17, 1931 (J. Ogilvie). A distinct species, perhaps best compared with *H. nitescens* Ckll., from which it is known by the shorter second cubital cell, wings not brownish, and much stouter axillary spines. *H. chlorops* Ckll. and *H. bevisi* Ckll. are much smaller, with brownish wings. The shining mark on clypeus is suggestive of *H. crassulus* Ckll.

***Heriades debilicornis*, sp. n.**

Male.—Length about 6.4 mm., anterior wing 3.5; robust, black, including mandibles, the unusually short antennae with the flagellum red beneath, the tegulae dusky rufous, pubescence white, dense at sides of face and front, and on apical part of clypeus except a median line; head large, circular seen from in front; mandibles very broad, with a very stout apical tooth, and a transverse cutting edge, which is undulate with the suggestion of two small teeth (mandibles approaching the type of *H. pellucidus* Ckll. and *H. usakensis* Ckll.); clypeal margin nearly simple, with a pair of transverse shining callosities; clypeus dull and very minutely sculptured, seeming to have a slight median ridge, but this is illusory, due to a median line being free from hair; supraclypeal area dull; vertex shining, well punctured; mesothorax shining, with rather small punctures, and a distinct median groove; scutellum shining, somewhat angulate in middle; axillae unarmed, sculptured like scutellum; truncation of metathorax polished; wings greyish hyaline; stigma small, dusky reddish; nervures brown; basal nervure nearly reaching nervulus; second cubital cell receiving first recurrent nervure far from base, the second nearer apex; hind coxae very robust; hind femora stout; hair on inner side of hind tarsi fulvous; abdomen with the tergites shining, the fourth more finely punctured than second and third; six visible tergites, the sixth not modified; basin of first tergite small but well defined; first four tergites with very thin, more or less imperfect apical hair-bands.

Belgian Congo (Katanga): Sakania, Sept. 1931 (J. Ogilvie). Apparently allied to *H. sulcatiferus* Ckll., but does not have the frontal depressions, and the wings are not strongly dusky. The specific name is suggested by the relatively short slender flagellum; the scape is large and robust.

***Heriades communis* Cockerell.**

This species is very common in the Katanga country. I find that the females have a sharp strong spine on the first abdominal sternite, not mentioned in the original description. Frequently it can not be seen, owing to the position of the abdomen and legs, but it is clearly visible in a series of specimens from Elisabethville, Tenke, Bianco, Kafubu Mission, and Katanga Mission.

***Heriades pellucidus* Cockerell.**

Belgian Congo: South of Bukavu, Aug. 28, 1931, ♂ (A. Mackie). Described from Natal.

Heriades centralis Benoist.

Belgian Congo: South of Bukavu, Aug. 28, 1931, 2 ♂ (L. Ogilvie, J. Ogilvie), 2 ♀ (Cockerell, A. Mackie). These are not *H. communis* Ckll., but they seem to agree well with *H. centralis*, described from Kindu, and to confirm the suggestion of Benoist that *H. burgeoni* Benoist, from the same place, is the female of *H. centralis*. There remains, however, some doubt whether this species is to be separated from *H. impressus* Schletterer.

Noteriades chapini (Cockerell).

Belgian Congo: Elisabethville, Sept., 1931, ♀ (J. Ogilvie).

BOOK NOTICE.

The Problems of Insect Study, by Paul Knight, Assistant Professor of Entomology, University of Maryland; second edition, quarto, paper, illustrated, bibliography, 132 pp. Edwards Bros., Inc., Ann Arbor, Mich., 1939. \$2.50.

Although the author of this interesting and valuable book states frankly that it "contains nothing that has not been published many times" the manner in which the subject matter is marshalled and presented is refreshingly original and effective.

The work consists in six parts or chapters as follows: I, The Insect Problem; II, Man Surveys The Damage; III, Man Counts The Gains; IV, Man Appraises A Competitor; V, Man Classifies the Hexapods; VI, Tentative Solutions.

An Appendix follows containing a bibliography together with a list of common and scientific names of important insects.

This book presents a rapidly drawn but faithful picture of the entire science of entomology in a way that may readily be assimilated by the uninitiated. Although this is a task that would seem difficult under the most liberal of spatial limitations, the author has succeeded within the scope of somewhat more than 100 pages, in producing what impresses the writer as the very best epitome of the subject that has come to his notice.

W. R. W.

MINUTES OF THE 509th REGULAR MEETING OF THE ENTOMOLOGICAL SOCIETY OF WASHINGTON.

The 509th meeting of the Society was held at 8 p. m., Thursday, April 4, 1940, in Room 43 of the National Museum. There were 41 members and 13 visitors present, and President Muesebeck presided. The report of the previous meeting was accepted as read.

The President commented upon recent sales of literature by the Corresponding Secretary, D. J. Caffrey.

Under Notes and Exhibition of Specimens, President Muesebeck spoke briefly concerning Braconidae of the genus *Elasmosoma*. Species of this genus